

Title (en)

HUMAN HEAD DETECTION METHOD, ELECTRONIC DEVICE AND STORAGE MEDIUM

Title (de)

VERFAHREN ZU ERKENNUNG EINES MENSCHLICHEN KOPFES, ELEKTRONISCHE VORRICHTUNG UND SPEICHERMEDIUM

Title (fr)

PROCÉDÉ DE DÉTECTION DE TÊTE HUMAINE, DISPOSITIF ÉLECTRONIQUE ET SUPPORT DE STOCKAGE

Publication

EP 3570209 A1 20191120 (EN)

Application

EP 18738888 A 20180102

Priority

- CN 201710029244 A 20170116
- CN 2018070008 W 20180102

Abstract (en)

A human head detection method includes: segmenting an image to be detected into more than one sub-image; inputting each sub-image to a convolutional neural network trained according to a training image having a calibrated human head position respectively, and outputting, by a preprocessing layer including a convolutional layer and a pooling layer in the convolutional neural network, a first feature corresponding to each sub-image; mapping, through a convolutional layer after the preprocessing layer in the convolutional neural network, the first feature corresponding to each sub-image to a second feature corresponding to each sub-image; mapping, through a regression layer in the convolutional neural network, the second feature corresponding to each sub-image to a human head position corresponding to each sub-image and a corresponding confidence level of the human head position; and filtering, according to the corresponding confidence level, the human head position corresponding to each sub-image, to acquire the human head position detected in the image to be detected.

IPC 8 full level

G06V 10/764 (2022.01)

CPC (source: CN EP US)

G06F 18/214 (2023.01 - CN US); **G06F 18/22** (2023.01 - CN US); **G06N 3/045** (2023.01 - EP); **G06N 3/082** (2013.01 - CN EP US); **G06T 7/10** (2016.12 - US); **G06T 7/20** (2013.01 - US); **G06T 7/246** (2016.12 - EP); **G06T 7/73** (2016.12 - EP); **G06T 7/74** (2016.12 - US); **G06V 10/454** (2022.01 - EP US); **G06V 10/751** (2022.01 - EP US); **G06V 10/764** (2022.01 - EP US); **G06V 10/82** (2022.01 - EP US); **G06V 20/53** (2022.01 - CN EP US); **G06V 40/10** (2022.01 - CN EP US); **G07C 9/00** (2013.01 - CN EP US); **G06T 2207/10016** (2013.01 - EP US); **G06T 2207/20021** (2013.01 - EP US); **G06T 2207/20081** (2013.01 - EP US); **G06T 2207/20084** (2013.01 - EP US); **G06T 2207/30196** (2013.01 - CN EP US); **G06T 2207/30242** (2013.01 - CN EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2019206085 A1 20190704; CN 106845383 A 20170613; CN 106845383 B 20230606; EP 3570209 A1 20191120; EP 3570209 A4 20201223; US 10796450 B2 20201006; US 2019206083 A1 20190704; WO 2018130104 A1 20180719

DOCDB simple family (application)

US 201916351093 A 20190312; CN 201710029244 A 20170116; CN 2018070008 W 20180102; EP 18738888 A 20180102; US 201916299866 A 20190312